



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/516,849	03/02/2000	Drew Bertagna	134/006	4129

35114 7590 12/15/2003

ALCATEL INTERNETWORKING SYSTEM, INC.
ALCATEL-INTELLECTUAL PROPERTY DEPARTMENT
3400 W. PLANO PARKWAY, MS LEGL2
PLANO, TX 75075

EXAMINER

CHOUDHARY, ANITA

ART UNIT	PAPER NUMBER
----------	--------------

2153

DATE MAILED: 12/15/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/516,849

Applicant(s)

BERTAGNA, DREW

Examiner

Anita Choudhary

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The amendment filed on September 15, 2003 under 37 CFR 1.312 has been entered.

Claims 6, 18 and 20 have been amended and are presented for further examination. New claims 37 have been added.

Claims 1-37 are presented.

Response to Arguments

Applicant's arguments with respect to claim 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6-14, 18-23, 27, 28, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Berl et al (US 6,084,879).

Berl show a system for priority routing of heterogeneous packets through a network using a filter system. The filter system assigns transmission priorities levels according to format and session identifiers of incoming packets in order to transmit over the packets over a predefined communication channel. Berl shows:

Art Unit: 2153

- Receiving a plurality of packets including respective first priorities (format identifiers, FID, and local form session identifiers, LFSID, col. 11 lines 44-47).
- Generating respective second priorities (transmission priority levels, TP level) as a function of first priorities (FID, LSFID). Berl shows the use of filters for matching FID and LSFID to a TP level, col. 11 lines 61-65).
- Prioritizing selected ones (those that have a match in the filter) of the plurality of packets as a function of respective ones of the second priorities (TP levels) (col. 11 line 65- col. 12 line 7).
- Transmitting the plurality of packets including the respective second priorities on a second port (col. 12 lines 1-10 fig. 7, 732-738).

In referring to claim 6, Berl shows:

- Receiving a packet with an included priority (FID, LSFID, col. 11 line 44-47).
- Determining a first priority (TP level) for the packet based on the included priority (FID, LSFID, col. 11 lines 61-65).
- Determining whether to mark the packet. Berl shows a filter for marking packet with a “tag” according to TP level. (col. 9 lines 64- col. 10 line 2, col. 12 lines 2-10).
- Prioritizing the packet in accordance with the first TP level if the packet is tagged (see fig. 7, col. 11 line 65- col. 12 line 7).

In referring to claim 7 and 19, Berl shows, method for prioritizing a packet of not in accordance with a second priority (default priority) as a function of whether the packet is marked of not. If a filter match is not found a default priority is set and a tag from step 1050 of figure 10 is not designated (see fig. 10, col. 11 lines 65- col. 12 line 10).

Art Unit: 2153

In referring to claim 8 and 20, Berl shows a first priority is determined by as function of first value in the packet (FID) and the marking (tag) is determined as a function of second value (LSFID) in the packet (see fig. 10 col. 10 lines 41-49).

In referring to claim 9 and 23, Berl shows the first priority (TP level) is instantiated in the packet upon transmission from the switch (col. 12 lines 2-8).

In referring to claim 10 and 22, Berl shows that the mark is at least a single bit (col. 12 lines 2-8).

In referring to claim 11, Berl shows the tag is incorporated into TOS field (col. 12 lines 2-8).

In referring to claim 12, Berl shows prioritization by applying the packet to a queue (fig. 7, 712-718) determined as a function of the FID and LSFID (col. 9 line 64- col. 10 line 11, fig. 10 1025-1050).

In referring to claim 13, prioritization to a queue is determined as a function of second priority (default priority 1035, 1046, col. 12 lines 7-10).

In referring to claim 14 and 21, Berl shows second priority (default priority) is determined as a function of a third value in the packet (FID), wherein the first (LSFID) and second (TP level) and third (FID) values are different (see fig. 10).

In referring to claim 18, Berl shows,

- Determining a first priority for the packet based on the included priority (FID).
- Marking the packet with a priority selector indicator (tag indicating TP level, col. 9 lines 64- col. 10 line 2).
- Transmitting the packet (725)

Art Unit: 2153

- A second network interface for receiving the packet (DLSw 614)
- Prioritizing the packet depending on the value of the priority selector indicator (tag) wherein the packet is prioritized in accordance with the first priority (TP level, col. 10 line 22-31).
- Transmitting packet to second network through IP network (fig. 7, 605).

In referring to claim 27, Berl shows selectable prioritization (see fig. 10 and col. 11 line 44- col. 12 line 10).

- Receiving on a first port a packet with a tagged priority (FID).
- Generating a first priority (TP level) as a function of the tagged priority (FID).
- Including the first priority in the packet (tagging with a TP level)
- Marking (tagging) the packet of not based on a first value (assigned TP level) associated with the packet.
- Identifying a second priority (default priority) based on a second value (LSFID) associated with the packet
- Determining whether to apply the first priority (TP level) or the second priority (default priority) based on whether the packet is marked of not (is tagged or not).

In referring to claim 28 and 33, Berl shows,

- Receiving plurality of packets with an included priority (FID, LSFID col. 11 line 44-47).
- Determining a first priority (high-level transmission protocol) for the packets based on the included priority (FID, LSFID, col. 9 lines 64- col. 10 line 11, col. 11 lines 61-65).
- Appending a priority selector indicator (TP level tag) comprising bits to the packets, wherein the priority select indicator is assigned a first value (a value for high-level priority) or a

second value (value for low-level priority) depending on a first packet field via matching FID value in the packet to the filter (800) (col. 9 line 64- col. 10 line 11, col. 10 lines 41- 49).

- Transmitting packets to (725) to second network interface (DLSw 614).
- Prioritizing each of the packets as a function of the value of the priority selector indicator (“tag”) in accordance with:
 - The first priority if the value of the priority selector indicator is the first value (bits indicating high-level transmission priority) (col. 10 lines 21-31).
 - A second priority if the value of the priority selector is the second value (bits indicating low-level transmission priority) (col. 10 lines 21-31).
- Transmitting packets to a second network (fig. 7, 732-738).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-5, 15-17, 24-26, 29, 30-32, and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berl in view of Kadambi et al (US 6,335,935).

In referring to claim 2 and 3, Although Berl shows substantial features of the claimed invention, Berl does not show selecting packets priority as a function of source or destination

Art Unit: 2153

address. Nonetheless this feature is well known in the art, and would have been an obvious modification to the system disclosed by Kadambi.

In an analogous art, Kadambi shows a system for network switching architecture with a fast filtering processor. Kadambi shows prioritization based on source (CosScr) and destination (CosDst) address (col. 16 lines 57-60, col. 17 lines 11-13).

Given this feature, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system to employ the feature shown by Kadambi in order to use standard Class of Service for table filtering of untagged packets (col. 20 lines 24-41).

In referring to claims 4, 5, and 36, Kadambi shows the first and second priorities being 802.1Q tag priorities (col. 16 lines 50-56, col. 17 lines 57-63, col. 18 lines 31-43, col. 20 line 24-41, col. 21 lines 29-45).

In referring to claim 15, 24, and 34, Kadambi shows first value as a tag priority (col. 20 lines 24-29).

In referring to claim 16, 17, 25, 26, and 35, Kadambi shows second value as a source or destination address (col. 20 lines 29-33).

In referring to claim 29 and 37, Kadambi shows 802.1p priorities mapping from one priority to another (col. 21 lines 29-41).

In referring to claim 30, Kadambi shows prioritization based on source (CosScr) (col. 17 lines 11-13).

In referring to claim 31, Berl shows the tag is incorporated into TOS field (col. 12 lines 2-8).

Art Unit: 2153

In referring to claim 32, Berl shows second priority is determined from policy rules defined by filter (800) (col. 10 lines 41-49).

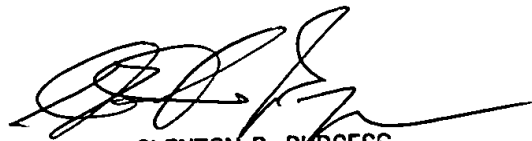
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita Choudhary whose telephone number is (703) 305-5268. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

AC
December 5, 2003


GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100